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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,985	05/11/2006	Corrado Bassi	76294-PCT-US/RDK	8551
23432 7590 12/30/2008 COOPER & DUNHAM, LLP 30 Rockefeller Plaza 20th Floor NEW YORK, NY 10112				
EXAMINER				
SAVAGE, JASON L				
ART UNIT		PAPER NUMBER		
1794				
MAIL DATE		DELIVERY MODE		
12/30/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/578,985

Applicant(s)

BASSI ET AL.

Examiner

JASON L. SAVAGE

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/86)
- Paper No(s)/Mail Date 20060626
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

Claim Objections

Claims 11 and 21 are objected to because of the following informalities:

In claim 11, line 3, "as a deep-drawn body part" is awkward. The claim language could be clarified such as by employing the same language recited in claim 22 --deep-drawn--.

In claim 21, line 3, the deletion of the limitation "component" after "the second" makes the language somewhat unclear. It is recommended to add --component--after "second" to clarify the claim.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 3 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the claimed AlMgSi sheet having a copper content of between 0.05 to 0.30 wt%, does not reasonably provide enablement for the copper content being **0.25** (emphasis added) to 0.30 wt%. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims.

It is noted that claim 14 recites that the copper content is between 0.05 to 0.30 and page 4, line 20 of the specification recites the same. As such, the limitation has been interpreted as meaning the lower bound of the copper content is 0.05 instead of 0.25 since the 0.25 content is an obvious typographical error.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 12 and the claims dependent thereon are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 12, the limitation of "a substantial part" is indefinite since it is not clear what constitutes "substantial". The claim has been interpreted as meaning -- wherein Mg and Si in the sheet metal alloy are present as separate Mg_2Si and Si particles to prevent artificial ageing--.

Claim Rejections - 35 USC § 102/103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Warblicher et al (US 3,816,190).

Warblichler teaches an extruded AlMgSi component which is subjected to a heat treatment to form fine particle precipitates of Mg and Si thus providing a sheet having improved processability (col. 1, ln. 16-40). As such Warlichler would anticipate the limitation that Mg and Si are present as the claimed particles to prevent artificial ageing. In the alternative, if there is a difference between the prior art and that which is claimed, it would have been minor and obvious

Warblichler further teaches that the AlMgSi alloy may have Si between 0.3-0.7, Mg 0.4-0.9, Fe 0.4, Mn 0.3, Cr 0.05 which overlaps the claimed compositions in claim 2.

Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Gulotti et al (US 3,990,922)

Gulotti teaches an AlMgSi billet sheet containing Mg₂Si particles (col. 2, ln. 38-49) and thus would anticipate the limitation that Mg and Si are present as the claimed particles to prevent artificial ageing. In the alternative, if there is a difference between the prior art and that which is claimed, it would have been minor and obvious.

Gulotti further teaches that the AlMgSi alloy comprises Si between 0.4 to 0.8, Mg 0.8-1.2, Cu 0.15-0.40, Cr 0.04-0.35, Fe up to 0.7, Mn up to 0.15, Zn up to 0.25, Ti up to 0.15 and others individually up to 0.05 the total being up to 0.15 (col. 2, ln. 55-64) which overlaps the compositions of claim 2 wherein the Mg content is 0.8 wt%.

Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Azuma et al (JP 09-067659)

Azuma teaches an extruded AlMgSi component containing Mg₂Si particles from a pre-ageing treatment (abs) and thus would anticipate the limitation that Mg and Si are present as the claimed particles to prevent artificial ageing. In the alternative, if there is a difference between the prior art and that which is claimed, it would have been minor and obvious.

Regarding claim 2, Azuma further teaches that the AlMgSi alloy comprises Si between 0.2 to 0.6, Mg 0.45-0.9, Cu 0.10, Fe 0.35, Mn 0.10, Cr 0.10, Zn 0.10, Ti 0.10 (Col. 1, table at the bottom) which overlaps the compositions wherein the Si content is 0.6 wt%.

Regarding claims 3-6 and 8-9, Azuma teaches the recited elements in amounts which overlap the claimed ranges.

Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yoshihara et al (EP 0 997 547).

Yoshihara teaches a high strength extruded AlMgSi component containing Mg₂Si particles (abs) and thus would anticipate the limitation that Mg and Si are present as the claimed particles to prevent artificial ageing. In the alternative, if there is a difference between the prior art and that which is claimed, it would have been minor and obvious.

Yoshihara further teaches that the AlMgSi alloy comprises Si between 0.2 to 1.8, Mg 0.2-1.6, Cu up to 1.0, Fe up to 0.7, Mn 0.05-0.5, Cr 0.01-0.2, Ti 0.01-0.10 and Zr 0.01-0.2 (par[0021]) which overlaps and anticipates the compositions in claims 2-9

Claims 1-11 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Timm et al (CA 2 363 116).

Timm teaches forming a high strength extruded AlMgSi sheet component. Timm further teaches that care must be taken during processing for if the cooling rate is too slow, Si and Mg₂Si particles precipitate (p. 3, ln. 4-15). While Timm teaches that the precipitation of these particles is not desirable, it is still a disclosure that an AlMgSi sheet containing the recited particles was formed and thus would anticipate the claim limitations. In the alternative, if there is a difference between the prior art and that which is claimed, it would have been minor and obvious.

Timm further teaches that the AlMgSi alloy comprises Si between 0.5 to 0.8, Mg 0.4-0.65, Cu 0.05-0.20, Fe 0.05-0.20, vanadium at a maximum of 0.20 and Mn at a maximum of 0.10 which overlaps and anticipates the compositions in claims 2-9.

Regarding claims 10-11, Timm teaches the sheet is used to form a vehicle automobile body parts such as structural components like doors which is formed by deep drawing and bending and thus would meet the claim limitations (p. 1, ln. 22-34).

Claim Rejections - 35 USC § 103

Claims 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Azuma et al (JP 09-067659)

Regarding claim 7, Azuma teaches a AlMgSi alloy which substantially overlaps the claimed composition with the exception of Fe being within 0.05-0.20. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to

have recognized that similar AlMgSi alloys including those having a slightly lower iron content compared to alloy explicitly recited by Azuma could be employed with a reasonable expectation of success.

Regarding claims 8-9, Azuma teaches the recited elements in amounts which overlap the claimed ranges.

Regarding claim 10-11, although Azuma does not recite that the AlMgSi component is a panel of the claimed automotive components, extruded AlMgSi materials such as formed by Azuma are known to be suitable for use in the claimed components. It would have been obvious to have used the component of Azuma to form automotive components having improved strength.

Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshihara et al (EP 0 997 547)

Regarding claim 10-11, although Yoshihara does not recite that the AlMgSi component is a panel of the claimed automotive components, extruded AlMgSi materials such as formed by Yoshihara are known to be suitable for use in the claimed components. It would have been obvious to have used the component of Yoshihara to form automotive components having improved strength.

Allowable Subject Matter

The following is a statement of reasons for the indication of allowable subject matter for claims 12-22:

The prior art teaches what is set forth above however it does not teach or suggest an automobile component comprising first and second AlMgSi sheet metal components wherein after artificial ageing of the first body component with the second component, the second component has lower mechanical strength. The reason for the second component having a lower strength being due to the Mg and Si in the second component being present as particles Si and Mg₂Si which prevents artificial ageing of the second component.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON L. SAVAGE whose telephone number is (571)272-1542. The examiner can normally be reached on M-F 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on 571-272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason Savage/
12-21-08

/Jennifer McNeil/
Supervisory Patent Examiner, Art Unit 1794